



Maryland Green Building Council Meeting Summary

Wednesday October 26, 2016 – 10 A.M. -12 P.M.

**100 Community Place, 1st Floor Conf. room B
Crownsville, Maryland 21032-2023**

Attendees:

Fulya Kocak – MDGBC - Chair
Cherise Seals - MDGBC
Nakita Reed - MDGBC
Christine Varney MDGBC
Lisa Ferretto – MDGBC
Stephen Gilliss - DGS

Martha Shrader - USM
Anne Raines - MDP
Susan Gore - DBM
Laura Armstrong - MDE
Laura Rogers – MDOT
Norman Wang – DHCD

Support:

Ellen Robertson - DGS

Guests:

Alicia Moran - AM media + Marketing
Randolph Wilson - DGS

I. Greetings / Introductions

- II. Fulya Kocak gave a presentation on LEED V4 focusing on changes and items related to the current mandatory credits included in the current version of the High Performance Green Building Program (HPGBP). The following are some highlights from this presentation
- A. There are several new categories: Integrative Process, Location and Transportation (formerly in location and site).
 - B. Same 110 credits are available, however, many are changed.
 - C. Scorecard is different due to credit names or description change
 - D. Old version sunsets completely in June of 2021.
 - E. Review of credits and categories
 - 1. Integrative Process – Energy model, siting and other energy related items are determined in the planning phase, very early in the process. The intent is to look at energy before hand, not well into the process. This also includes water sources. This is highly recommended by Fulya as a mandatory credit.
 - 2. Site location – watch for regulations when located near bodies of water. Also asbestos no longer qualifies a site as a brownfield. High priority sites have been added.

3. Diverse uses (retail, services and civic and community facilities) now must be in accessible walking distance. The description has changed some as well.
4. Public Transportation now must show frequency of transit, number of trips weekdays and weekends.
5. Bicycle racks and showers are no longer enough. Now you need to demonstrate adjacency to a bicycle network. Shower and bike racks calculation has changed as well. Also defines width of a bike lane. We will likely lose a lot of these credits.
6. Green Vehicles – Now you have to provide charging stations to get this in addition to priority parking. This will be challenging for state buildings in terms of where the money goes and how (unless we give away the electricity)
7. Parking capacity reduction is also more difficult.
8. New credit – site assessment credit – Fulya believes this one may be worth making mandatory. Site study is performed earlier in the process and includes a few more items as a simple report.
9. Restore habitat has added restoration of soil. Includes an option to pay \$.40 per square foot to an accredited land trust. Cost could be \$5-10,000.
10. Open space – Adding elements of physical interaction, such as furnishings, fountains etc. is now part of the credit.
11. Stormwater – Quality and quantity are combined into one credit instead of the former 2 credits. Laura can refer to someone at MDE to compare state requirements to LEED V4. Do MDE requirements meet v4 requirements without additional work?
12. Heat island effect – parking underground requirement has increased. Site and roof are now combined and only yield one point instead of two.
13. Light pollution reduction may actually be easier. It no longer requires interior spillover to be controlled after 11 pm. It also uses the BUG rating system (backlight, uplight, glare) so it's easier to select exterior fixtures which comply. Fulya recommends keeping this as a mandatory credit. There are also some state statutes on light pollution. We should look at these as an action item.
14. Water use reduction – metering is a prerequisite in LEED v4. We may need to compare the metering requirements of LEED v4 and IgCC. 30% reduction is a new prerequisite using EPA water sense calculations. Outdoor water use reduction points have decreased for as a 50% reduction yields just 1 point. Zero irrigation gets 2 points. We can keep this one the same as a mandatory credit.
15. Wastewater reduction – this credit was removed as it was not being used. Rather than pushing this market, LEED abandoned it.
16. As an action item we need to study water use reduction.
17. Cooling tower credit is new – Fulya recommends against it as recycling the water 10 times as required may damage the system. It also requires a 3rd party water treatment. Can get a 2nd point for using a non-potable water source for the cooling tower.
18. Can also add additional water sub meters for a credit.
19. Fundamental commissioning – Agent must now come on board by the end of design development. It might make sense to warn users in the HPGBP to get the commissioning agent on board early. They must also

commission the building envelope. These use to be part of enhanced commissioning.

20. Energy use reduction. The IECC may be ahead of LEED since LEED was intended to go out several years ago. As a mandatory credit Lisa thinks the % reduction is still applicable. Ben Roush has some information he can share with us comparing LEED, IgCC and ASHRAE.

21. Energy metering is another credit. Building level metering is a prerequisite. Sub-metering is now a little easier. Anything that uses 10% or more of the energy can be sub metered (rather than separating by uses such as plug loads and lighting) For this you get 1 credit. It is now called advanced energy metering.

22. Enhanced commissioning now gives up to 6 points. You can do parts of this to gain up to 6 points. This includes actual testing for envelope commissioning. Lisa said that the IgCC may have building envelope commissioning/testing and we should look at requiring it.

23. Demand-Response is a brand new credit. This is similar to the local residential programs which control your energy use remotely during energy demand periods. Required to shed 10% energy during these periods. If your utility doesn't provide this you can still get the credit for including the infrastructure for future installation.

24. Renewable power has been reduced from 7 to 3 points. It is curious that the market has not been transformed and yet the credits and thus incentives are being reduced.

25. Carbon offsets has been changed some. Use to get recs for 35% for 2 points. Now you need 5 years for 50% for 1 point, 2 points 100%. They have added offsets for gas usage. Overall it is much harder to get points for this.

26. Materials and resources – Life cycle assessment is about the cradle to grave impact on the environment. It uses a third party software to evaluate. However you not only have to use the assessment software, you also have to reduce the impact for 1 point. There are four options under this credit. To get the building re-use credit it has to be an historic or blighted building.

27. Material transparency – Now you have to look at the environmental impact – more than single attributes. This replaces the old recycled content credits. Now you have to provide Environmental Product Declarations (EPDs) or impact statements for the building products. You need twenty different products from 5 different manufacturers. Or for 50% of the products based on cost. This reduces the market and the designer's choice of products. This needs to be studied ahead of time by the AE and much more careful spec writing.

28. Health Product Declarations – Product reports on health hazards of materials. Manufacturers are not doing much of this yet as it looks bad for their products. How liable is the architect and contractor by using a product which declares hazardous material?

29. Many of the material credits from the past are lumped into one credit now – so instead of 6 or 7 credits, materials provide 1. This one should be easy though. FSC wood is no longer a singular credit so this may affect our ban on this credit. However, it should still not be used or perceived to contribute to this credit.

30. There is a new item for materials – location valuation factor – if extraction, manufacture and purchase is within 100 miles (no longer 500 miles) you can double the credit. This might apply to concrete and CMU or other aggregate products. There is not much else available locally for this credit. There is an online calculator for these credits. Material re-use can't be used here as there is credit elsewhere for this.
31. A waste management plan is now a prerequisite. Must show at least three different material streams.
32. Can get 2 points for reducing waste to 2.5 pounds per square foot. But this is difficult unless you are doing some pre-fabrication.
33. Indoor environmental quality used to have a number of separate credits. Many of these are now lumped into one. Also, indoor air quality testing now includes having furniture in place. Stephen noted that a lot of the furniture in state buildings is bought by the state agencies from the state prison system so there may not be a lot of flexibility in furniture purchasing.
34. Low emitting materials are all lumped together on one credit. It is also no longer just low VOC but also emission criteria.
35. Quality views credits have changed and must be actual quality views, not just outside. Sky, trees, etc.
36. Acoustical performance credits are new and include HVAC background noise and sound transmission. We may need technical evaluation of this.

F. Presentation concluded.

III. Review of action items and assign responsibilities

The following is a list of action items which came out of the presentation. This primarily involves researching the mandatory credits included in the high Performance Green Building Program (HPGBP), item 2.a.i-iii. These include but may not be not limited to:

- A. Light pollution reduction. Compare to state requirements. Ellen and Steve can get these regs.
- B. LEED v4 storm water regulations compared to state regulations. Can v4 be satisfied just by following current MDE requirements? Laura Armstrong will look at.
- C. Water efficiency. We need a plumbing engineer to look at water use reduction and cooling tower requirements. Lisa Ferretto suggested involving regular visitor and engineer Ben Roush for several of the engineering issues. Ben has also studied and presented LEED v4 in the past.
- D. Materials and Resources – need input from a contractor for a current v4 project. Nakita Reed said she could look into this.
- E. Indoor Environmental Quality – Low emitting materials. Nakita will look into this. Also compare to IgCC. Lisa is looking at this. This item also includes the construction IAQ Management Plan which appears to be a no brainer to keep. More difficult however, is the IAQ air testing which now includes furniture in place during testing. This will have to be compared to the IgCC testing requirements.
- F. Compare IgCC and LEED water metering and water sub metering – Lisa suggests Ben again for this.

- G. Also, investigate IECC vs. LEED on energy issues
- H. Compare all changes to the mandatory credits with IgCC.
- F. Which of the LEED v4 credits are worthy of maintaining as mandatory.
- G. Discuss mandatory envelope commissioning to be equivalent to IgCC. Ben Roush could comment on this.
- H. Check IgCC for demand response. Does it include it and if so, how does it compare.
- I. Include IgCC update study in the next meeting. IgCC is available online for everyone to see.

IV. Green Globes

- A. We had a request for a review and consideration
- B. The Council agreed to take a look at it sometime in the future after LEED v4 and IgCC study and update.

V. Once Around the Table:

- A. Rescheduled the next meeting to December 14, 2016 due to the Thanksgiving and Christmas Holidays.

VI. The meeting was adjourned at 12 p.m. The next meeting is scheduled for Wednesday December 14, 2016 at 10 a.m. at 100 Community Place, Maryland Historical Trust Board of Trustees conference room, Crownsville, Maryland 21032-2023.

(once on the third floor, turn AWAY from the Maryland Historical Trust sign and TOWARD the gold mirror, then turn immediately left down the hallway to the MHT Board of Trustees conference room)

The preceding is intended as a paraphrase / summary only of the discussions held on this meeting date. Council members are requested to review the summary and notify the writer of any errors, omissions, additions or unintended misrepresentations of the discussion.